

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3

REF TCCA STC: SH04-7

REF FAA STC: SR01997NY

REF EASA STC: EASA.IM.R.S.00710

## PURPOSE:

Update the D412-702-041A/045A/-041B/-045B kits for compatibility with the Dart D412-769-011 Aft Facing Seat Kit.

## CHANGE:

Quantity (1) each of D412-702-111A/-113A is replaced with D412-702-121A/-123A. Also Qty (4) x AN4-27A bolts are added to the kits for compatibility with the Dart seat. When installing the AN4 bolts in the Dart seat, open the Ø0.188" holes to Ø0.257" (see sheet 4 detail J of this service instruction for reference). Alternate nuts added (see flag note 2 & 3, sheet 4). The parts list in section 25.28 (pg. 87) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 38) of IIN-D412-702 Rev. E is amended as follows:

QTY -041A	QTY -043A	QTY -045A	QTY -047A	QTY -049A	PART NUMBER	DESCRIPTION
X					D412-702-041A	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045A	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

## IS:

1		1			D412-702-111A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-043	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-1	DECAL
1		1			D412-702-113A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-044	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-2	DECAL
4		4			AN4-27A	BOLT (NEW)

## WAS:

2		2			D412-702-111A	HARNESS ASSEMBLY
2		2			D412-702-113A	HARNESS ASSEMBLY

\* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.01.13  
CERT. NO.: SH04-7  
ISSUE NO.: 3

C	UPDATE MS51865-6C ACORN NUT QUANTITY	JPH	10.01.13
B	ADD FLAG NOTE 2 & 3 AND OPEN AN3 HOLES TO AN4	CP	09.12.10
A	NEW ISSUE, NCR 09-068	CP	09.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

The parts list in section 25.28 (pg. 93) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 40) of IIN-D412-702 Rev. E is amended as follows:

QTY -041B	QTY -043B	QTY -045B	QTY -047B	QTY -049B	PART NUMBER	DESCRIPTION
X					D412-702-041B	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045B	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1		1			D412-702-111B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-047	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
1		1			D412-702-113B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-048	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
4		4			AN4-27A	BOLT (ADD)

WAS:

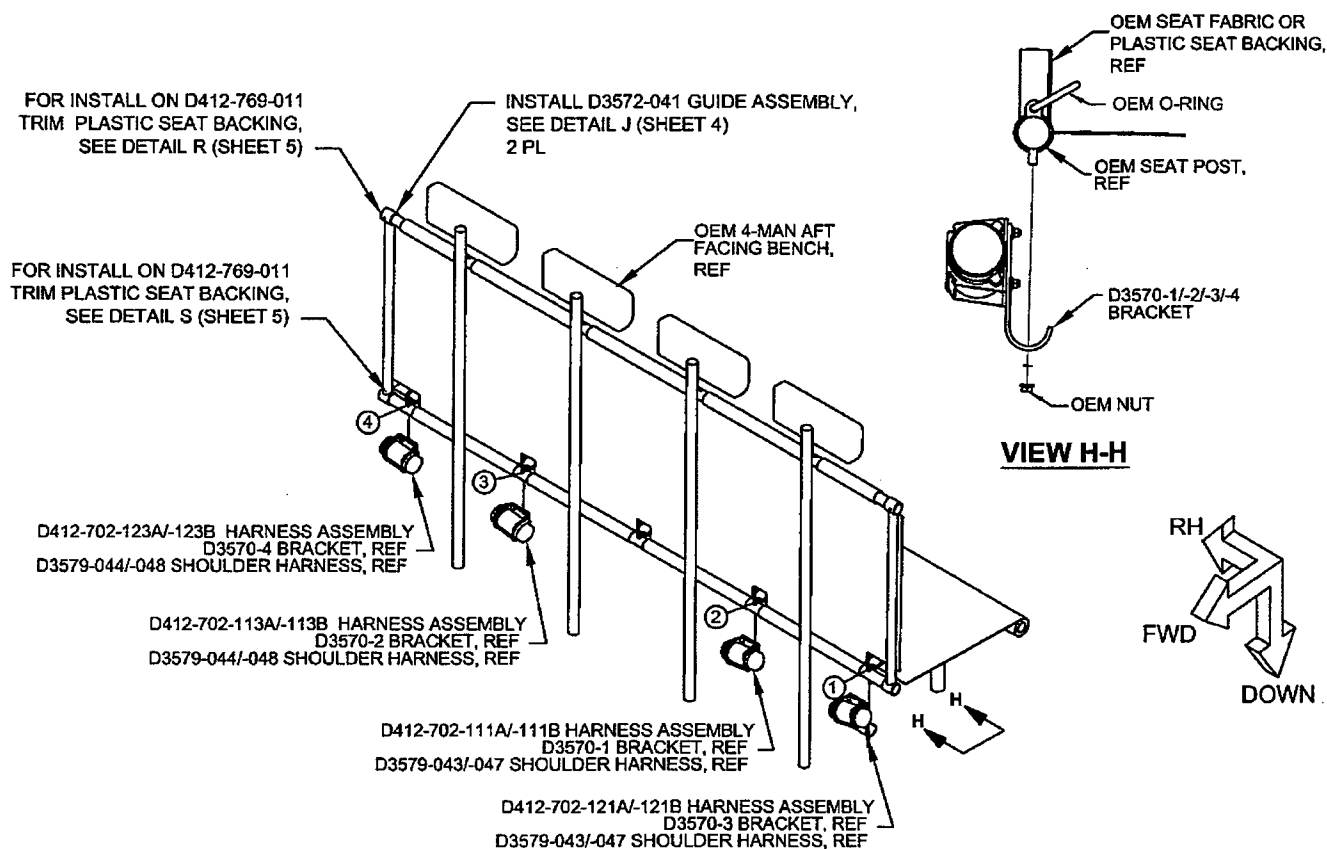
2		2			D412-702-111B	HARNESS ASSEMBLY
2		2			D412-702-113B	HARNESS ASSEMBLY

\* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED	
BY:	<i>[Signature]</i>
D. SHEPHERD (DE # 02)	
DATE:	10.01.13
CERT. NO.:	SH04-7
ISSUE NO.:	3

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Figures 4.8 (pg. 25) of IIN-D412-702 Rev. E and 25.12 (pg. 69) of ICA-D412-702 Rev. 3 are updated as follows:



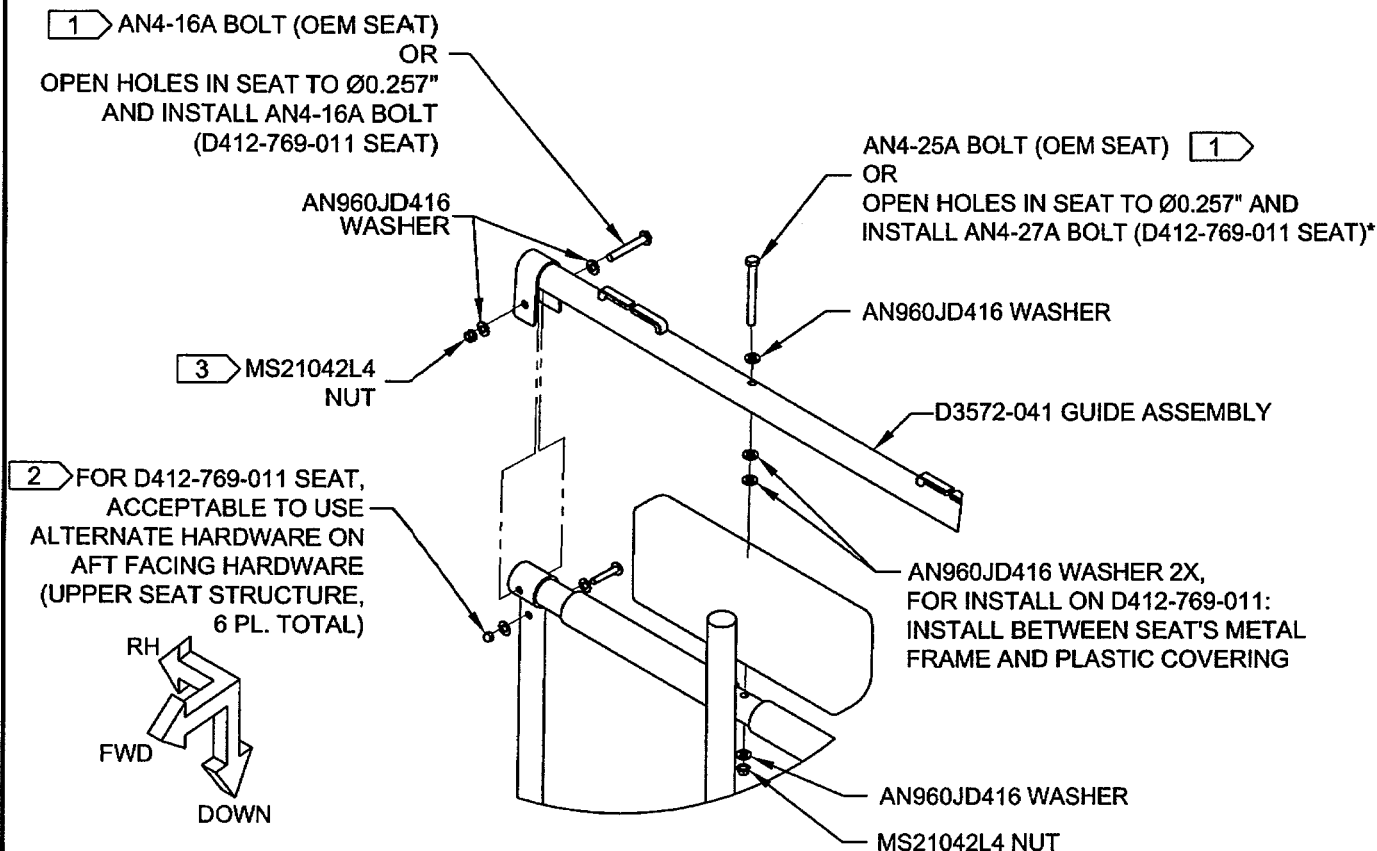
**FIGURE 4.8. SHOULDER BELT INSTALLATION**  
**FIGURE 25.12 D412-702-045A/-045B 4-MAN 3-POINT AFT FACING SHOULDER HARNESS KIT**

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**  
BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.01.13  
CERT. NO.: SH04-7  
ISSUE NO.: 3

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		<b>HAWKESBURY, ONTARIO, CANADA</b>	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



**DETAIL J: D3572-041 INSTALLATION**  
(RH SHOWN, LH OPPOSITE)

- 1 ACCEPTABLE TO USE LONGER/SHORTER AN4 BOLTS, ADD ADDITIONAL AN960JD416 WASHERS, OR SUBSTITUTE AN960JD416L WASHERS TO ENSURE 1.5-2 THREADS IN SAFETY
- 2 ACCEPTABLE TO USE MS51865-6C AS ALTERNATE NUT (6 PLACES TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD AN960JD10/10L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE PROTRUDING THREADS MEASURE 0.160 MIN, 0.190 MAX. (BEFORE NUT INSTALLATION)
- 3 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT (2 PLACES TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD AN960JD416/416L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE PROTRUDING THREADS MEASURE 0.200 MIN, 0.250 MAX. (BEFORE NUT INSTALLATION)

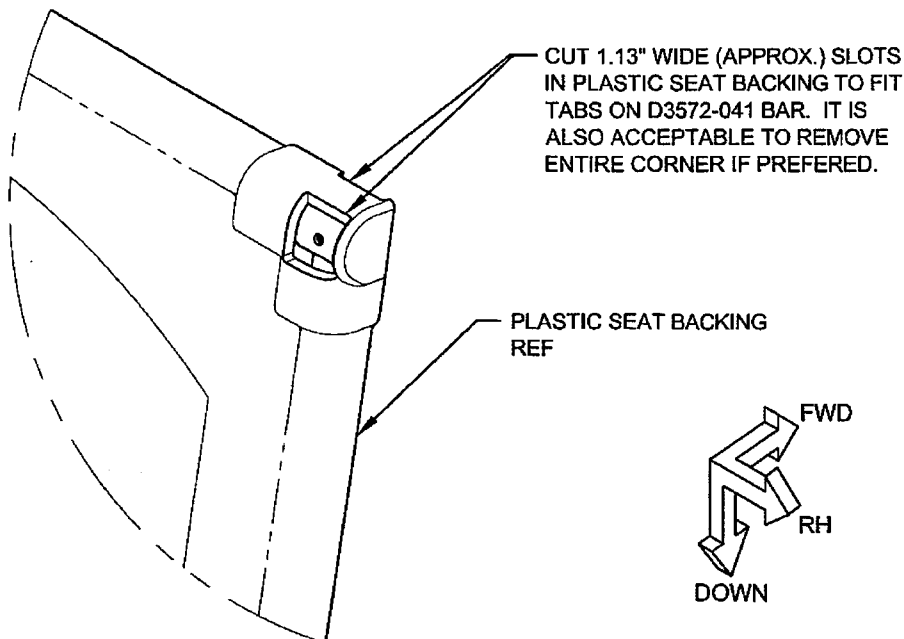
CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

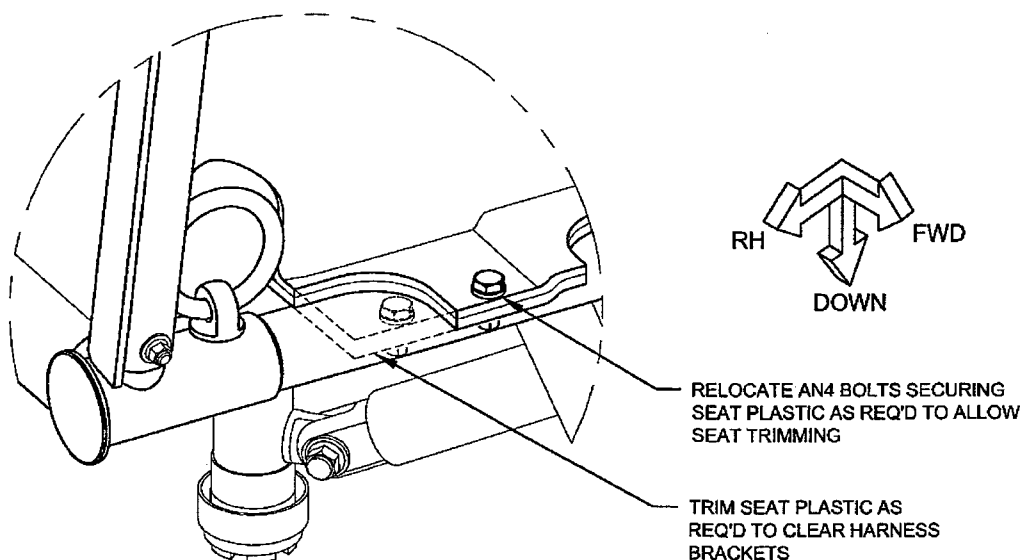
DATE: 10.01.13  
CERT. NO.: SH04-7  
ISSUE NO.: 3

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		<b>HAWKESBURY, ONTARIO, CANADA</b>	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



#### DETAIL R

VIEW LOOKING AT FRONT OF SEAT BACKING, TOP-RH CORNER SHOWN (TOP-LH CORNER SIMILAR),  
FOR INSTALL ON D412-769-011 ONLY



#### DETAIL S






VIEW LOOKING AT REAR OF SEAT, BOTTOM-RH CORNER SHOWN (BOTTOM-LH CORNER SIMILAR),  
FOR INSTALL ON D412-769-011 ONLY

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.01.13  
CERT. NO.: SH04-7  
ISSUE NO.: 3

DESIGN		<b>DART AEROSPACE LTD</b> <b>HAWKESBURY, ONTARIO, CANADA</b>	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			